



THURLBY THANDAR INSTRUMENTS

CPX400A

DUAL 60V 20A POWER FLEX POWER SUPPLY

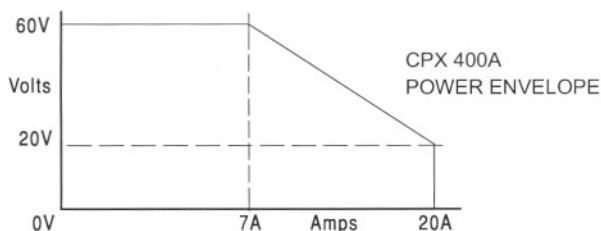
INSTRUCTION MANUAL

Specification

General specifications apply for the temperature range 5°C to 40°C. Accuracy specifications apply for the temperature range 18°C to 28°C after 1 hour warm-up with no load and calibration at 23°C. Typical specifications are determined by design and are not guaranteed.

OUTPUT SPECIFICATIONS

Voltage Range:	0V to 60V
Current Range:	0A to 20A
Power Range:	Up to 420W
Output Voltage Setting:	By coarse and fine controls.
Output Current Setting:	By single logarithmic control.
Operating Mode:	Constant voltage or constant current with automatic cross-over provided that the power demanded stays within the power envelope, see graph. Outside of this envelope the output becomes unregulated.



Output Switch:	Electronic. Preset voltage and current displayed when off.
Output Terminals:	4mm terminals on 19mm (0.75") pitch. 30A max.
Sensing:	Switchable between local and remote. Spring-loaded push terminals for remote connection.
Output Protection:	Forward protection by Over-Voltage Protection (OVP) trip; maximum voltage that should be applied to the terminals is 70V. Reverse protection by diode clamp for reverse currents up to 3A.
Over-temperature Protection:	The output will be tripped off if a fault causes the internal temperature to rise excessively.
OVP Range:	10% to 110% of maximum output voltage set by front panel screwdriver adjustment.
Line Regulation:	Change in output for a 10% line change: Constant voltage: <0.01% of maximum output Constant current: <0.01% of maximum output
Load Regulation:	Change in output for any load change within PowerFlex envelope, remote sense connected: Constant voltage: <0.01% of maximum output Constant current: <0.05% of maximum output
Ripple & Noise (20MHz bandwidth):	4mVrms max; typically <2mVrms, <10mV pk-pk, at maximum load, CV mode.

Transient Load Response:	<250us to within 50mV of set level for a 5% to 95% load change.
Temperature Coefficient:	Typically <100ppm/°C
Status Indication:	Output on lamp. Constant voltage mode lamp. Constant current mode lamp. Unregulated (power limit) lamp Trip message on display.

METER SPECIFICATIONS

Meter Types:	Dual 4 digit meters with 12.5mm (0.5") LEDs. Reading rate 4 Hz.
Meter Resolutions:	10mV, 10mA
Meter Accuracies:	Voltage 0.1% of reading \pm 2 digits, Current 0.3% of reading \pm 2 digits

GENERAL

AC Input:	110V – 240V AC \pm 10%, 50/60Hz. Installation Category II.
Power Consumption:	1250VA max.
Operating Range:	+5°C to +40°C, 20% to 80% RH.
Storage Range:	–40°C to + 70°C.
Environmental:	Indoor use at altitudes up to 2000m, Pollution Degree 2.
Safety:	Complies with EN61010-1.
EMC:	Complies with EN61326.
Size:	210 x 130 x 375mm (WxHxD) half rack width x 3U height (optional rack mounting kit available).
Weight:	6kg